ComEd Ex. 4.0

STATE OF ILLINOIS
ILLINOIS COMMERCE COMMISSION

ILLINOIS COMMERCE COMMISSION	)	
On Its Own Motion	)	
-vs-	)	
COMMONWEALTH EDISON COMPANY	)	No. 99-0282
	)	
Proceeding pursuant to Section 16-111(g) of the	)	
Public Utilities Act concerning proposed sale of	)	
fossil fuel fired generating plants.	)	

TESTIMONY OF WILLIAM J. BAUMOL
PROFESSOR OF ECONOMICS
DIRECTOR OF THE C.V. STARR CENTER FOR APPLIED ECONOMICS
NEW YORK UNIVERSITY

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Q. What is your name and address?

A. My name is William J. Baumol. I reside at 45 Ocean Avenue, Monmouth Beach, New Jersey, 07750, USA

Q. What is your occupation and title?

A. I am professor of economics and Director of the C.V. Starr Center for Applied Economics at New York University.

Q. What are your academic and professional credentials?

A. I received my bachelor's degree in economics from the College of the City of New York in 1942 and my Ph.D. from the University of London in 1949. After my military service in Europe during World War II, I taught at the London School of Economics from 1947 through 1949. I then served as a member of the faculty of Princeton University for 42 years, where I recently became professor emeritus, and where I still hold an appointment as Senior Research Economist. I have written approximately 30 professional books and 500 articles. I have served as president of four leading professional organizations of economists including the American Economic Association, the world's largest organization of economists from business, government, colleges and universities. I hold nine honorary degrees and other honors in the United States and abroad, and am a member of three of the nation's leading honorific societies, including the National Academy of Science.

I have taught university courses on the economics of antitrust, regulation and industrial organization, and have been invited to lecture on these subjects in forums throughout the world, most recently in Australia, France, Israel, Italy, England and Venezuela. I have also written a number of articles and books related to these subjects and have testified extensively on antitrust and regulatory issues before courts and regulatory agencies in the United States and abroad. Over my almost fifty years of activity as an economist, I have

analyzed a number of issues related to competition and antitrust matters in a wide variety of industries. A more detailed summary of my qualifications is provided in Exhibit 4.1.

I have had extensive experience in analysis of the effects of various types of changes in arrangements upon the competitiveness of a market. In particular, I have testified before regulatory agencies, courts and congressional committees on the consequences for competitiveness of either divestiture of facilities or addition to facilities through acquisition or merger. I have written three books on issues related to matters affecting competitiveness of the market. These are *Contestable Markets and the Theory of Industry Structure*, (coauthors J.C. Panzar and R.D. Willig, Harcourt Brace, revised edition 1988), *Toward Competition in Local Telephony* (coauthor J.G. Sidak, MIT Press 1994) and *Transmission Pricing and Stranded Costs in the Electric Power Industry* (coauthor J.G. Sidak, AEI Press 1995). I have also published articles on related subjects in *The Yale Law Journal, The Journal of Law and Economics and the Yale Journal of Regulation*. The most recent of these articles appeared this spring. In terms of the effects of divestiture I first testified on the subject beginning in the 1970s in connection with AT&T's divestiture of its local service companies. I have also testified in a number of cases involving merger and acquisitions. In addition, I have prepared a number of pieces of testimony on the advent of competition in generation activity in the electric power industry and the issues for competitiveness that this development engenders.

Q. Are you familiar with Notice of Property Sale ("Notice") submitted by Commonwealth Edison Company ("ComEd") in these proceedings?

A. I have reviewed that document.

Q. Are you familiar with the transaction that is the subject of that Notice?

A. Yes, I am familiar with that transaction.

Q. Have you analyzed that transaction?

A. Yes, I have. At the request of ComEd I have analyzed the transaction to determine whether it will help to stimulate competition in the Illinois energy marketplace and create "a vibrant, open electricity market."

Q. Did you reach a conclusion on those issues?

A. Yes. The proposed sale of ComEd's fossil-fuel powered generating plants is a clear opportunity for enhancement of competition in generation in the State of Illinois. There is every reason to expect that the transaction will fulfil its promise to enhance competition. The very act of divestiture of the plants will contribute to achievement of that goal, and ComEd will have a continuing incentive to move matters in that direction. It seems clear that the general welfare calls for the transaction to be carried out without delay and without impediment.

Q. What is the basis for your conclusion?

A. My conclusion is based on my long study of similar subjects in this and other regulatory industries and upon an examination of the pertinent facts of this transaction. The report that I have prepared on the matter summarizes the basis for my conclusion. That report is provided in Exhibit 4.2.

Q. Does this conclude your testimony?

A. Yes.

WILLIAM J. BAUMOL

Curriculum Vitae **January 1999**

Born February 26, 1922, New York, NY
Married, two children
BSS College of the City of New York, 1942
Ph.D University of London, 1949

1942-43 and 1946: Junior Economist, U.S. Dept. of Agriculture
1947-49: Assist. Lecturer, London School of Economics
1949-92: Professor of Economics, Princeton University
1992-current: Senior Research Economist and Professor of Economics Emeritus, Princeton University
1971-current: Professor of Economics and Director, C.V. Starr Center for Applied Economics, New York University

AWARDS & HONORS:
1953 Fellow, Econometric Society
1965 Honorary LL.D, Rider College (Trustee, 1960-70)
1968 Joseph Douglas Green 1895 Professorship of Economics, Princeton University
1970 Honorary Fellow, London School of Economics
1971 Elected Member, American Academy of Arts and Sciences
1971 Honorary Doctorate, Stockholm School of Economics
1973 Honorary Doctor of Humane Letters, Knox College
1973 Honorary Doctorate, University of Basel
1975 John R. Commons Award, Omicron Delta Epsilon
1975 Townsend Harris Medal, Alumni Assoc. of the City College of New York
1977 Elected Member, American Philosophical Society
1982 Distinguished Fellow, American Economic Association
1984 Distinguished Member, Economic Association of Puerto Rico
1986 Winner, Assoc. of American Publishers Award for Best Book in Business, Management and Economics, *Superfairness: Applications and Theory*
1987 Recipient, Frank E. Seidman Distinguished Award in Political Economy
1987 Elected Member, National Academy of Sciences
1989 Winner, Assoc. of Am. Publishers Annual Awards for Excellence in Publishing, Honorable Mention in Social Sciences, *Productivity and American Leadership: The Long View*
1992 Recipient, First Senior Scholar in the Arts and Sciences Award, New York University
1993 Winner, Assoc. of Environmental and Resource Economists Award for Publication of Enduring Quality, *The Theory of Environmental Policy*
1996 Honorary Degree, University of Limburg, Maastricht, Holland
1996 Honorary Professorship, University of Belgrano, Buenos Aires, Argentina
1997 Henry H. Villard Research Award, National Council on Economic Education and National Association of Economic Educators
1997 Docteur Honoris Causa, Universite des Sciences et Technologies de Lille,

Lille, France

PROFESSIONAL ACTIVITIES:

Member, Advisory Board, Insurance Information Institute Press
Principal Investigator, Students at Risk Committee, Institute for Education & Social Policy
Member, Advisory Committee, World Resources Institute (founding member)
Member, Board of Trustees, Joint Council on Economic Education
Member, Advisory Committee, Center for Entrepreneurial Studies, Graduate School of Business Administration, New York University
Member, Board of Directors, Theater Development Fund
Member, National Science Foundation review panel for Science and Technology Research Centers
Member, Advisory Board, Fishman-Davidson Center for the Study of the Service Sector, Wharton School, University of Pennsylvania
Correspondent, Committee on Human Rights, and member, Committee on the National Institute for the Environment, National Academy of Sciences
Past President, American Economic Association (1981), Association of Environmental and Resource Economists (1979), Eastern Economic Association (1978-79), Atlantic Economic Society (1985)
Past Chairman and Member, Economic Policy Council, State of New Jersey (1967-75)
Past Vice President (1968-70) and Chairman, Committee on Economic Status of the Profession (1962-70), American Association of University Professors
At various times on editorial and/or advisory boards for: *American Economic Review; Kyklos; Journal of Economic Literature; Journal of Cultural Economics; Journal of Economic Perspectives; Management Science; Economic Notes (Italy); Journal of Economic Education; Impresa e Concorrenza (Italy); THESIS: Theory and History of Economic and Social Institutions and Structures (USSR); Feminist Economics; Japan and the World Economy; Supreme Court Economic Review, Economia: Revista Quadrimestral (Portugal).*

Frequent consultant to government and industry, in U.S. and many other countries.

BOOKS PUBLISHED:

Economic Dynamics (with R. Turvey), 1951, 1959, 1970
Welfare Economics and the Theory of the State, 1952, 1965.
Economic Processes and Policies (with L.V. Chandler), 1954
Business Behavior, Value and Growth, 1959, 1966
What Price Economic Growth? (with Klaus Knorr), 1961
Economic Theory and Operations Analysis, 1961, 1965, 1972, 1976
The Stock Market and Economic Efficiency, 1965
Performing Arts: The Economic Dilemma (with W.G. Bowen), 1966
Precursors in Mathematical Economics: An Anthology (with S.M. Goldfeld), 1968
Portfolio Theory: The Selection of Asset Combinations, 1970
Economics of Academic Libraries (with M. Marcus), 1973

The Theory of Environmental Policy (with W.E. Oates), 1975, 1988
Selected Economic Writings of William J. Baumol, E.E. Bailey, ed., 1976
Economics, Environmental Policy, and the Quality of Life (with W.E. Oates and S.A. Batey Blackman), 1979
Economics: Principles and Policy (with A.S. Blinder), 1979, 1982, 1985, 1987, 1991, 1994, 1997
Public and Private Enterprise in a Mixed Economy (ed.), 1980.
Contestable Markets and the Theory of Industry Structure (with R.D. Willig and J.C. Panzar), 1982, 1987
Inflation and the Performing Arts (ed. with H. Baumol), 1984
Productivity Growth and U.S. Competitiveness (ed. with K. McLennan), 1985
Superfairness: Applications and Theory, 1986
Microtheory: Applications and Origins, 1986
The Information Economy and the Implications of Unbalanced Growth (with L. Osberg and E.N. Wolff), 1989
Productivity and American Leadership: The Long View (with S.A. Batey Blackman and E.N. Wolff), 1989
The Economics of Mutual Fund Markets: Competition vs. Regulation (with S.M. Goldfeld, L.A. Gordon and M.F. Koehn), 1990
Perfect Markets and Easy Virtue: Business Ethics and the Invisible Hand (with S.A. Batey Blackman), 1991
Entrepreneurship, Management and the Structure of Payoffs, 1993
Toward Competition in Local Telephony (with Gregory Sidak), 1994
Convergence of Productivity: Cross-National Studies and Historical Evidence (ed. with R.R. Nelson and E.N. Wolff), 1994
Transmission Pricing and Stranded Costs in the Electric Power Industry (with J. Gregory Sidak), 1995
Assessing Educational Practices: The Contribution of Economics (ed. with W.E. Becker), 1995

Plus approximately 500 articles published in professional journals.

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IMPLICATIONS FOR COMPETITION OF THE COMMONWEALTH EDISON COMPANY FOSSIL PLANT SALE

By William J. Baumol

The Issue

As technology and the regulatory environment in the electric power industry have evolved it has become clear that competition in the generation of power is both feasible and desirable. In contrast, scale economies and other considerations generally rule out a competitive regime in the transmission and distribution of the generated power. The result has been a move toward encouragement of entry and competition in the generation sector of the industry, without fundamental modification of the single-supplier arrangement prevalent in the transmission and distribution activities. This means that the public utility firms that in many cases were for a long time sole suppliers of all the components of processes necessary to provide power to its users are no longer the sole generators of that power. Entrants have appeared, making use of new capacity, capacity they had previously acquired for other purposes, or capacity they have acquired, by mutual agreement, from the utilities. The issue in question here stems from such a transfer of capacity, in this case entailing the sale by Commonwealth Edison Company ("ComEd" or the "Utility") of its fossil-fuel-fired generating plants and some additional facilities to Edison Mission Energy of Rosemead, California.

The subject that is raised by this transaction is whether it will contribute to the competitiveness in the generation sector of the industry in the geographic area that is affected. All things being equal, the addition of another seller of generation should only increase competition in that area. Thus, it is appropriate to inquire into whether the transaction will change the objective economic incentives of the seller, which will continue to retain and use some 50 percent of its previous generating capacity in the form of its nuclear plants and long-term contracted capacity to conduct future activities in a manner compatible with preservation and even strengthening of the competitive forces in the market? The Utility, in advocating the transaction, predictably, asserts that the sale will help to stimulate competition in the Illinois energy marketplace and to create "...a vibrant, open electricity market." Obviously, the issue is important for the public welfare in the region, and merits dispassionate and careful analysis. I have been asked by ComEd to carry out such an analysis.

Summary of Conclusions

On the basis of my long study of similar subjects in this and other regulatory industries I have examined the issue and the pertinent facts. This has led me to several basic conclusions.

1. A firm in the circumstances of ComEd, i.e., that provides transmission and distribution services at tariffed, cost-based rates approved by State and Federal regulators has every incentive to do what it can to stimulate and encourage effective competition in the generation of electricity. This is so because, as will be

explained below, in such a situation the firm's critical activities would be transmission and distribution, with generation constituting an ancillary input of the final product, delivered electric power. The choice for ComEd between generating electricity itself and acquiring it from others becomes, in effect, a make-or-buy decision. In such a case the firm clearly benefits most by obtaining that ancillary input from the cheapest available source. A competitive generation market will ensure that this input is supplied to it at the lowest possible cost.

2. If the Utility transmits energy that it has generated itself rather than energy generated by competitors, it will, in effect, be purchasing that power from itself. But that will be the most profitable choice only if it can generate electricity at a cost lower than the price at which it can be acquired from others. In a regime where transmission and distribution prices are set on a rational basis, this arrangement serves the general interest. This is so, because it means that the Utility will generate power only to the extent that it can do so more cheaply than others can, and that its interests will best be served if the remainder of the power supplied by the industry comes from a competitive market.

3. Two facts provide powerful evidence that ComEd believes competition in generation is, indeed, in its interest. First, the terms of the sale, agreed to voluntarily by both parties, commit ComEd to purchase capacity from the stations it is selling, for a number of years. This commitment provides an assured source of

revenue to the entrant during its initial years of operation in the geographic area. It also demonstrates that ComEd recognizes the profitability of dealing with electricity generated by a competitor rather than only the power that it itself has generated. Second, there is the fact that after the sale of its generation facilities the Utility will still continue to have the obligation to meet certain demand that is not served by other generators. Directly relevant is the fact that in the facilities-sale transaction here at issue the Utility's agreement with the purchaser is that the former will, if needed, be able to purchase power from all of those facilities, but a portion of that capacity (which increases substantially over the five-year term of the purchase agreement) will be available to the Utility, I am informed, *only at a price substantially above the expected market level*. This, of course, ensures that such purchases are very likely to be very unprofitable for the Utility and that its interests will be served by the existence and profitability of competing generators who will be in a position to serve the demand of the Utility's current customers and will find it profitable to do so.

4. This leads to three final conclusions. The first conclusion is that if transmission fees are set as the public interest requires, i.e. at a level that will enable the Utility to recover its prudent and reasonable costs, including its opportunity costs, self interest will, dependably, drive the Utility to do all it can to foster and preserve competition in electricity generation. Second, nothing about the transaction which

is the subject of this proceeding will aversely affect the Utility's incentives to promote competition. Finally, the proposed sale will undoubtedly be a major step toward realization of an effectively competitive market.

Competition and the Interests of ComEd

It is almost self evident that the sale of the ComEd fossil-fueled generating plants will serve to enhance competition. The transaction itself is procompetitive on its face. For, once carried out, a single generator will be replaced by two generating firms. Moreover, entry of the second firm will have been carried out without the delay and the uncertainties that inevitably accompany new construction. The entrant will have avoided many regulatory preliminaries such as the need to obtain permission for the construction and siting of new facilities that can also involve substantial delays and outlays of effort. The plants in question are conveniently located in relation to the required transmission facilities. Consequently, the transmission and distribution costs that the entrant must bear will be correspondingly low. This, of course, is a key requirement for the effectiveness of the competitive pressures that an entrant contributes to the market. Since the entrant is committed by the agreement to undertake the construction of additional generating capacity, and that entrant itself is an experienced, recognized and successful supplier of generation, it will undoubtedly contribute materially to the competitiveness of the market. In short, the transaction will enhance the number of suppliers in the market, it will keep down the

costs of entry of the purchasers of the facilities and it will provide an entrant that is in a position to contribute effectively to the powers of competition in the market.

There is only one misunderstanding that can plausibly arise about this compelling conclusion. Since ComEd will continue to generate electricity of its own and have contractual commitments to other long-term capacity after the transaction is completed some observers may be impelled to question whether the asset sale will change its attitude in dealing with new competitors. This relates not only to the purchaser of the fossil-fuel facilities but also to other firms whose entry may be encouraged by success of the purchaser of the plants. Having sold its fossil-fueled generators, should ComEd be any less willing to go along with the growth of rivals of its own generator facilities?

The answer, supported by economic analysis, is that, if transmission rates are set consistent with the public interest (i.e., if they provide a reasonable opportunity for the Utility to recover its costs, including opportunity costs), the maximum profitability of ComEd's continuing transmission and distribution activities requires the market for generation to be effectively competitive. Recovery of opportunity costs here means that the utility is permitted to recover the same contribution to stranded costs whether it transmits electricity it generated itself or electricity generated by others. It is my understanding that Federal and State transmission and distribution rates are set on the basis of cost and both provide for the recovery of opportunity cost: i.e., through stranded cost charges at the Federal level and through the transition charge and other mechanisms at the State level. For purposes of my analysis, I assume that transmission and

distribution rates will be properly set in that they will actually allow a reasonable opportunity for recovery of all costs, including opportunity costs. The transaction will not change the rates that ComEd is entitled to receive for transmission and distribution and, therefore, will have no adverse effect on the incentives that ComEd has to support enhanced competition in generation. Instead, ComEd's sale will only promote competition among electricity generators.

When is it Profitable for the Final Power Distributor to "Buy" Generated Electricity Rather than Producing it Itself?

To understand why competitiveness of generation serves the interests of transmitters it must be recognized that the choice between power generated by competitors and power generated by the Utility itself is, in effect, a make-or-buy decision. An analogy derived from reality will make the point clear. Some years ago a number of electric utility firms entered into contracts to purchase electricity generated in Canada and elsewhere, using the electricity obtained in this way to supplement the power they generated themselves to meet demand. This, clearly, was a make-or-buy decision for the utilities, determining whether they would produce the power themselves or buy it from others, or do some of both. The lower the price of the delivered electricity the better off the utilities would have been as a result of these transactions. Since competitiveness of generation activity forces prices downward toward costs, such competitiveness obviously served the interests of the utilities. Moreover, if the market price of purchased power had been well below the cost a utility would have incurred in producing it itself,

it would have benefited the utilities to cease generation altogether and purchase all the power they needed from the competitive market in this scenario.

Two conclusions follow directly from this analogy. (1) To the firm that transmits and delivers electricity, the choice between its own generation and generation by competitors is strictly analogous to a make-or-buy decision. (2) In such a make-or-buy decision it is most profitable for the utility (a) to obtain the power from the cheapest source, whether its own or that of a competitor; (b) to reduce the costs of any such source of power, wherever possible; and (c) to encourage competition among suppliers of generated power as an effective way to reduce its costs.

The circumstances of the transaction here in question, however, differ from the situation just discussed in that electricity generated by competitors may be sold to final customers directly by those competitors themselves, not by the Utility. However, as will be shown next, this fact does not change the conclusions of the preceding paragraph in any substantive manner. Competition continues to serve the interests of the Utility.

Sale to Final Power Consumers by Competitors

In the previous example all transactions with final consumers were conducted by the utility. It sold to consumers power obtained from its own plant or from other suppliers under contract. The revenues the utility obtained from final consumers yielded a return on investment after subtraction of the utility's own costs and its payments to the generators from which it

purchased electricity. In such an arrangement it is clear that the lower the price it pays to suppliers under contract, the better off the utility will be.

The situation at issue in the ComEd transaction *may seem on its surface* very different from that in the preceding analogy, but that is largely a matter of appearance. It is true that here the competing generators and not the utility will deal with final consumers in the sale of power generated by those competitors. But it remains true that of the total revenue from total product sales, more will accrue to the transmitter the lower the amount competition permits the generators to take for themselves. This will, however, not take the obvious form of a larger share of the revenue to the utility. Rather, its enhanced earnings will result from the larger volume of purchases induced by a low price of generated power.

Specifically, if competition forces down the earnings of generation, the price of power to the consumer will also be low. That will stimulate sales of power. But all the power sold will have to be transmitted and distributed at prices authorized by regulatory authority. Those prices can be expected to be compensatory, since otherwise they would entail a taking. That is, they will yield a profit to the Utility on every unit of power sold and delivered to final consumers. Since the sale of every unit will yield a net return to the Utility, the more power that is sold under the distribution and transmission pricing formula approved by the regulator, the better off the Utility will be. In sum, we obtain the same conclusion as before. Viable competition in generation will serve the interests of the Utility and one can therefore expect the Utility to do what it can to promote it.

It should be noted here that this is not a novel doctrine invented just to lend support to those who seek approval of the plant-sale transaction. On the contrary, the conclusion rests on a long recognized result contributed by economic analysis of the case of vertically-related firms. This is the case where one firm obtains components of the final product from another. In the situation here at issue, the final product is, of course, delivered power, and its three prime components are generated electricity, transmission and distribution. Without any one of these the final-product purchaser could not obtain the power desired. What economic analysis indicates about this case is that the interest of the firm supplying one of the components is damaged by weakening of competition in supply of the other components which can be expected to raise the price of those other components.

Proof of the Pudding: ComEd's Voluntary Commitment to Purchase the Entrant's Power

As a matter of fact, ComEd has already demonstrated by its actions its commitment to effective competition in the generation of power. It is not only prepared to transmit and distribute electricity generated by the competitor. Under the terms of the sale of its plants it has also committed itself, for a number of years, to buy capacity from the generating stations it has sold. This is, of course, a direct decision to buy and not to make the power that is generated by this capacity. In other words, the Utility has undertaken to transmit and distribute energy it will acquire from its new competitor, to replace some of the energy it has previously generated itself.

Clearly, it is not doing this as an act of charity, but because it considers the arrangement to be profitable. Moreover, if it will be profitable in the period following the transfer of the plants it will obviously become even more profitable as other competitors embark on generation activity, helping to drive down prices and costs.

It is also significant here that in addition to sale of its base-load fossil-fired generating sites ComEd is selling peaking units located at nine sites throughout its service territory. This is significant because the peaking capacity is necessary to meet ComEd's continuing obligation to serve all otherwise unmet customer demand for power, even when that demand is at its highest. The fact that these facilities will no longer be the property of ComEd means, of course, that the Utility is expecting a significant share of such demand to be served by others. But that is something those others can do only if they are financially viable and find it profitable to continue in operation. That is, by selling its peaking units the Utility has clearly obligated itself to promote the viability of competition. As one noted economist has put an analogous matter, the Utility has, in effect, provided a hostage to ensure its support of a competitive market in generated electricity, a market to which it will have to turn to meet its continuing obligation to serve all peak demands.

ComEd has also taken another significant step that works in the same direction. It has acquired the option to obtain additional power from its divested facilities over and above the amounts it has committed itself to take. But what is most significant here is that it has obligated itself to pay for the power it obtains under this option a price well above what ComEd believes will be the market level of the capacity and energy charges. In short, it will be obligated to pay

more than the market price for such power. This clearly constitutes an invitation for entry by yet other generators whose power it will be more profitable for ComEd to utilize in periods when it is needed, in preference to the expensive product of the divested plants. The resultant opportunity for other entrants is precisely the sort of incentive that will help to induce them to come into the market, thereby contributing to its competitiveness.

The high price of power purchasable under the option just described will also serve as an incentive for ComEd to expand its own generating capacity if others do not come into the market and provide a more economical alternative. If such expansion does occur it will clearly add to the total amount of product in the market that is seeking customers. That is just another way of saying that this, too, will serve to enhance the force of competition in generation activity.

We see, then, that the desirability of competition in generation to ComEd is not merely a bit of theoretical argument. ComEd has, in effect, already voted with its feet. The reality is that it has already voluntarily undertaken three commitments that constrain it to act in a way that encourages competition in the future. It has committed itself to purchase power from Edison Mission Energy, the firm that is about to become a competitor of ComEd in generation. It has given up its peaking units, thereby virtually ensuring that it will have to depend upon competing generators during periods of peak demand. And it has committed itself to pay what it expects to be a price well above the market level for additional power it has the option to obtain from Edison Mission Energy, thereby enhancing the prospect of ComEd demand for the power generated by still other entrants. These are steps that ComEd could not be expected to take voluntarily if it

considered competition in generation to be a threat to its welfare rather than a source of benefit to itself, along with those benefits competition will provide to consumers.

What are the Alternatives to the Transaction?

The implications for competitiveness of generation of the planned sale of the fossil plants are, perhaps, brought out even more starkly by considering the alternatives. Suppose that for some reason, such as regulatory intervention, the proposed sale were to be aborted. What can be expected to follow? There are two obvious possibilities: delay or total preclusion of the sale.

If the sale were never to take place the damage to competition in generation is all too obvious. The market for generated electricity will be denied an additional and substantial generator. ComEd would continue to possess the bulk of the generating capacity in the geographic area, and would be driven to seek business for its large capacity. That might lead it to change from a promoter of competition in generation to an incumbent whose interests require it to strive to keep for itself as large a share of the market as it could retain.

The alternative, if the currently contemplated sale were to be aborted, is delay. In principle, the steps underlying the sale process could be repeated and ComEd could ultimately sell the plants to another purchaser or purchasers. But such a scenario is not without cost to the public. First of all, delay is costly in itself. If the lag entailed in reopening the process were to postpone the added competition for a year, it would mean a year of deprivation of the benefits of competition to the general public. The savings foregone by consumers during that year would

never be recouped. Moreover, as every specialist in financial calculations knows, a dollar saved one year in the future is worth materially less than a dollar saved today. In terms of the pertinent jargon, the discounted present value of a dollar saved in the future is decidedly lower than a dollar today. Thus, delay would materially reduce the public's prospective savings.

But that is not all of the damage to the public interest that would be caused by delay. The clearest attribute of *future* arrangements is their uncertainty -- the fact that no current observer can be sure of the forms and magnitudes which will materialize when they actually do occur. And uncertainty, too, is costly. That is precisely why firms and individuals pay for expensive insurance policies. The price of such a policy is an indicator of what it is worth to policyholders to rid themselves of uncertainty. And if the current sale were for some reason to be aborted or even to be delayed it must be recognized that substantial uncertainty, not only about the ultimate form of the transaction, but of its actual execution, will be the unavoidable consequence.

It is widely recognized that in regulated industries speed is not always to be expected in the approval and implementation acts that constitute major changes in current arrangements. That is an understandable feature inherent in the regulatory process. But that is no excuse for unnecessary delay that is sure to be costly to the public.

Conclusion: the Benefits of Competition

It is hardly necessary to devote substantial space to a discussion of the benefits of competition. These are widely understood and generally recognized. Competition ensures that

consumers will pay the lowest prices compatible with the financial viability of the suppliers of their purchases. It enforces maximal efficiency in the production process, condemning any firm that is incompetent or wasteful to lose its customers to rivals. It brings to customers service that is tailored to the purchaser's desires. It results in output volumes that best meet the needs and contribute to the efficiency of the economy. And it forces the industry constantly to pursue technical improvement – more efficient production process and better ways to serve consumers. That this is so is known to all those who have analyzed how markets work and what consequences the ways in which they work have for the general welfare.

It is also generally recognized that competition, despite all the benefits it offers, is sometime unattainable. Notably this is so when the state of technology entails substantial economies of scale and scope, so that mere size contributes substantially to reduction of the costs of a supplier. In such circumstances, the largest supplier has an automatic cost advantage over smaller rivals, and competition cannot generally materialize or survive. Where such economies of scale and scope are present the desirability of competition itself becomes questionable. This is so because the provision of product by a number of firms means that each must operate on a scale smaller than would be enough to meet the market's demands by itself, and unnecessary cost must be the result.

Fortunately, developments in power generation have made competition in that arena feasible and emphatically desirable. We now have the opportunity to bring its benefits to the consuming public, and to do so in short order. As I have explained here, the proposed sale of the

fossil-fuel powered plants is a clear opportunity for enhancement of the power of competition in generation in the State of Illinois. There is every reason to expect that the transaction will fulfill its promise to enhance competition. The very act of divestiture of the plants will contribute to achievement of that goal, and ComEd will have a continuing incentive to move matters in that direction. It seems clear that the general welfare calls for the transaction to be carried out without delay and without impediment.